



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/795,984	03/10/2004	Karp Sik Youn	46178	2260

1609 7590 02/01/2005

ROYLANCE, ABRAMS, BERDO & GOODMAN, L.L.P.  
1300 19TH STREET, N.W.  
SUITE 600  
WASHINGTON,, DC 20036

EXAMINER

FERGUSON, MARISSA L

ART UNIT

PAPER NUMBER

2854

DATE MAILED: 02/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/795,984

**Applicant(s)**

YOUN ET AL.

**Examiner**

Marissa L Ferguson

**Art Unit**

2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-~~5~~, 15, 18 and 19 is/are rejected. *AHH 1/27/05*
- 7) ☒ Claim(s) 6-14, 16, 17 and 20-22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

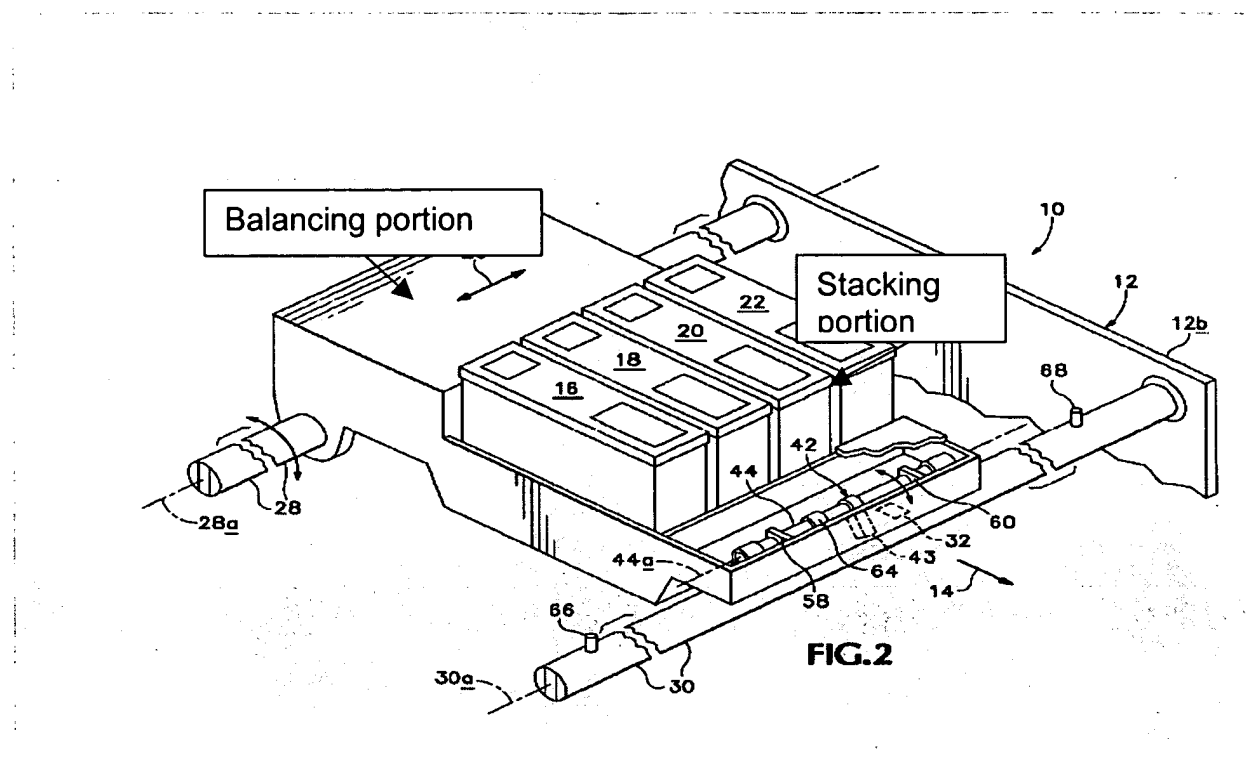
1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

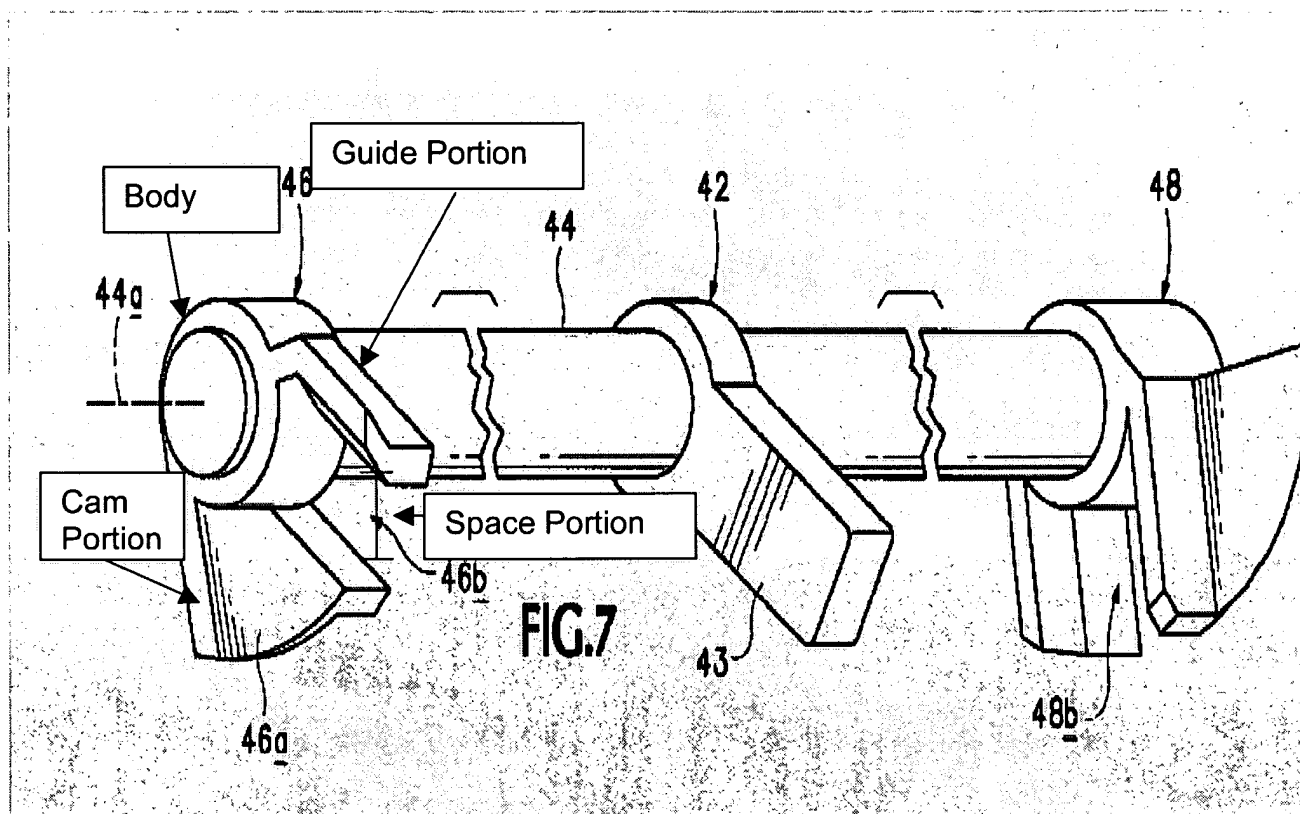
Claims 1-5,15,18 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated  
by Kelley et al. (US Patent 6,663,302).

Regarding claims 1 and 15, Kelley et al. teaches a carriage (24), which is rotatably installed on a guide shaft (28,30) and includes a stacking portion (16,18,20,22) cartridge is stacked, and a balancing portion (refer to figure on the next page) installed on a side opposite to the stacking portion, so as to move in a straight reciprocating motion along the guide shaft (28,30) and a head gap adjusting apparatus, which is rotatably installed in the balancing portion and adjusts a head gap by rotating the carriage centering on the guide shaft according to a thickness of a printing medium (Abstract, Column 3, Lines 64-67, Column 4, Lines 1-5 and reference made throughout patent).



Regarding claims 2 and 18, Kelley et al. teaches a body (refer to figure below), a cam portion (46a), which is provided on one end of the body and in which a cam radius having a predetermined shape is formed, a guide portion, which is provided on the other end of the body and is bent at a predetermined angle (Figures 9 and 10) and a support portion (44), which is provided on a side opposite to a surface in which the guide portion is formed while protruding from the body.

Regarding claim 3, Kelley et al. teaches wherein the cam portion and the guide portion protrude from the body (See figure 7 below).



Regarding claim 4, Kelley et al. teaches a cam portion and the guide portion are formed on the same surface as the body (Figure 7).

Regarding claims 5 and 19, Kelley et al. teaches wherein a space portion has a predetermined height is formed between the cam portion and the guide portion (See figure above).

***Allowable Subject Matter***

2. Claims 6-14,16,17 and 20-22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Reasons for Allowance***

3. The following is an examiner's statement of reasons for allowance:

Regarding claims 6 and 20, the prior art does not teach or render obvious and elastic unit that supports the head gap adjusting apparatus, one end of the elastic unit being supported by the carriage and the other end thereof being supported by the support portion.

Regarding claims 7 and 21, the prior art does not teach or render obvious a cam portion that includes a first cam radius formed on a surface opposite to the guide portion and a second cam radius formed on a surface perpendicular to the first cam radius.

Regarding claims 9 and 16, the prior art does not teach or render obvious wherein both ends of the guide shaft are supported by a bracket, and a bent portion, which is bent to a predetermined height, is provided on one end of the bracket, and first and second stoppers are provided at a predetermined interval on a top surface of the bent portion, so as to contact the guide portion of the head gap adjusting apparatus.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marissa L Ferguson whose telephone number is (571)

Art Unit: 2854


272-2163. The examiner can normally be reached on (M-T) 6:30am-4:00pm and every other(F) 7:30am-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Marissa L Ferguson  
Examiner  
Art Unit 2854

HLF  
\*\*\*

  
ANDREW H. HIRSHFELD  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800